

Navy Medicine

November-December 2005



Navy Medicine Responds

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Cover: LT Scott Grabill, USN (left) and HM3 Jose Rodriguez (right) take a young baby to receive medical treatment aboard USS *Iwo Jima* (LHD-7) during relief of Hurricane Katrina, New Orleans, LA. Story on page 13. Photo by PH2 Robert Strachko, USN.

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LCDR Thomas Donahue, MC (right) and LCDR Robert Rosenbaum, MC (left), both surgeons aboard USNS *Comfort* (T-AH 20), work together to construct a makeshift clinic in Biloxi, MS. Photo by JO Heather Weaver, USN.



HM1 Joshua Ross, assigned to Naval Mobile Construction Battalion Four Zero (NMCB-40), helps Plaquemines Parish resident change a tire on his bulldozer. NMCB-40 is helping to prepare the land for 19 trailers for evacuee families. Photo by JO1 James Pinsky, USN.

Department Rounds

Hospital Corpsmen and Dental Technicians Join Forces to Provide Top Health Care

The Navy Bureau of Medicine and Surgery (BUMED) marked the official establishment of the new Hospital Corpsman rating with a ceremony on 3 October. The new and improved rating represents the joining of the Hospital Corpsmen (HM) and Dental Technicians (DT) job specialties.

"The HM/DT merger is about combining forces to better meet the demands and needs of our changing Navy. With this merger, it will allow Navy medicine to better support our operational forces by ensuring all enlisted personnel have the same baseline of training, by improving flexibility in the utilization of all enlisted manpower, and by improving career opportunities for all our sailors," said BUMED Force Master Chief (SW/AW) J.L.K. DiRosa.

The Chief of Naval Operations approved Navy medicine's proposal to merge the Hospital Corpsman and Dental Technician ratings 30 August 2005. The focus of this merger will bring together the 27,000 HMs and the 3,000 DTs into one professional community—Hospital Corpsman. This merger will broaden their training requirements, increase their basic skills, provide advanced training in medical and dental specialty areas and optimally employ them for mission success.

Current HM and DT rated sailors that are eligible for the E-9 active duty selection board will have a combined board. The 2006 E-8 and E-9 active duty and Reserve selection boards will be combined boards. The combined E-7 exams and selection boards have also been approved for 2006. The first combined active duty petty officer advancement exam will happen in March 2006, and the combined Reserve petty officer exams will happen in August 2006.

Training for sailors newly recruited into the hospital corpsman field will combine both HM and DT job ratings skills. "There will be changes starting with the HM and DT 'A' schools. The revised HM 'A' school training plan incorporates foundational dental knowledge, skills, and abilities. These classes will be added while keeping the HM 'A' school length to 14 weeks," said DiRosa. "Upon completion of HM 'A' school, designated personnel will attend a follow-on dental assistant school to train in specialized dental assisting skills. Hospital corpsman training



Photo by Doris Ryan

BUMED members of the new Hospital Corpsman rating recite the Hospital Corps Pledge.

and education will continue at our Great Lakes, IL, medical training facilities until otherwise decided."

Plans are in place to implement changes in the HM and DT "A" school curriculums, consolidate advanced "C" schools and cross train current HMs and DTs to prepare for the new merged advancement exams.

The DT/HM rating unification is expected to take place over the next 2 years. Once complete, all Navy medicine DTs and HMs will be known as the HM community. □

—Story by Christine Mahoney, Public Affairs Office (M09BK2), Bureau of Medicine and Surgery, Washington, DC.

Navy Dental Corps Celebrates 93 Years of Service

Navy medicine celebrated the Dental Corps' 93rd anniversary 22 August, paying special recognition to the members who are stationed overseas and forward deployed.

"We recognize those people who are away from home, serving around the world, doing what we all put the uniform on to do," said CAPT Howard H. Fischer, Deputy Chief, Navy Dental Corps.

A Dental Corps Ball was one of the many similar celebrations that took place, paying tribute to the Corps' 93rd year.



LTJG Alexander G. Lyle, DC, poses in a French village a month after saving the life of a Marine corporal on the Western Front during World War I. For this action he was later awarded the Medal of Honor. Dr. Lyle is one of two Navy dental officers to receive the nation's highest military honor.

"Navy leadership saw the need to extend this dental service throughout the U.S. Navy. Starting in the 1890s, a series of bills were drawn up and introduced to Congress for the establishment of the Dental Corps. When Presley Rixey was the Navy Surgeon General, he established courses in elementary dentistry at the Naval Medical School he founded. Thanks to his persistence, his support and his connections, Navy dentistry finally became a reality in August 1912," said André Sobocinski, Office of the Historian, Bureau of Medicine and Surgery.

The integration of the hospital corpsmen and dental technician ratings were completed in August.

"When you went to corpsman school, you could receive radiation training or lab technician training. Now Dental Technicians will become another sub-specialty under the corpsman field," said Fischer.

Dental Corps officers now have the ability to hold leadership positions that were not available to them before. This further incorporates the Dental Corps into the daily functions of Navy medicine.

"We are actually more like the other medical corps than ever before. The reason for integrating is for the improvement of efficiency and to eliminate redundancies," said Fischer. "Our mission remains to provide world class dental care to our sailors and Marines." □

—Story by Mary Kate Zabroske, Public Affairs Office, Bureau of Medicine and Surgery.

Naval Hospital Bremerton Staff Departs for Kuwait

Nearly 40 staff members from Naval Hospital (NH) Bremerton left 4 September, bound for the U.S. Military Hospital in Kuwait, where they will serve for approximately 6 months in direct support of combat operations in Iraq.

A second group of about 35 will join this group of hospital corpsmen, dental technicians, physicians, nurses, dental officers, and support staff when they deploy in late October, said CAPT Mark Boman, executive officer NH Bremerton.

The team assembled before dawn at the hospital, where friends and family members gave last-minute well wishes and final goodbyes before the 4 a.m. departure.

CAPT Bill Roberts, commanding officer, greeted and spoke with departing sailors individually. To the assembled group, he gave one piece of parting advice.

"Take care of your patients, take care of each other, and we'll have you back here in a few months," he said.

The team stopped at Camp Pendleton enroute where they received several days of additional training before making the trip to Kuwait.

The deployed Bremerton personnel are treating injured soldiers, sailors, airmen, and Marines from the Iraqi area of operations. They are screening and treating service members assigned and traveling to and from Iraq via Kuwait.

The service members have relieved the 300-plus Naval Reservists from Fleet Hospital Dallas who staffed the hospital and its nine clinics throughout Kuwait for the past year. □

—Story by JO2 Fletcher Gibson, Public Affairs Office, Naval Hospital Bremerton, WA.

Manage Your Stress "Online"

The Navy Environmental Health Center, Portsmouth, VA, (NEHC) recently launched a web-based tool, known as the Navy Systematic Stress Management Program, to assist active duty sailors and Marines, and their families, in managing stress.

This program is the latest innovation in NEHC's health promotion community health awareness campaign, offering strategies for prevention, management, and early

intervention for stress. The *DoD Survey of Health Related Behaviors*, which measures the levels, sources, impact of stress, and the coping strategies used by the military has helped validate the need for this program. Based upon the results from the most recent survey, high levels of work-related stress were reported, acknowledged, and seem to be consistent across all services, with Navy and Marine Corps topping the list. The most frequently mentioned stressors were family separations and deployments. According to Dr. Mark Long, NEHC's Program Specialist for Stress Management, "We all face stress everyday and all of us can benefit from and improve our stress control strategies and stress busting skills". Dr. Long went on to say that, "Stress is part of daily living and the better we can cope with this stress, then the better we can deal with life, work, relationships, and other stressors."

The intent of the program is to enable any user access to a stress management tool regardless of location. "It doesn't matter if you're at sea, deployed to Iraq, on duty, or at home, the web program is available 24/7. Think of using the program as a way to build your stress muscles, to improve your resiliency, or even as a stress tune up," added Dr. Long.

Equally important is the fact that the Navy Systematic Stress Management Program supports healthcare providers, supervisors, or anyone else involved in stress management intervention, as well as individuals using the program as a "self-help" tool. In short, anyone (including family members or retirees) looking for stress management assistance can use this tool if they have access to a PC.

For more information on dealing with stress, visit The Navy Systematic Stress Management Program homepage available on the Navy Environmental Health Center website at <http://www-nehc.med.navy.mil/hp/stress/index.htm>. □

—Story by Hugh Cox, Public Affairs Office, Navy Environmental Health Center, Portsmouth, VA.

Navies Provide Medical, Dental Care in Philippines

Medical and dental professionals from USS *Harpers Ferry* (LSD-49) and the staff of Logistics Group Western Pacific treated more than 300 patients during a civic action project 18 August.

Local residents lined up for hours at the Doce Martires Elementary school for an opportunity to receive the free, routine medical and dental care being offered by the U.S.



Photo by JO2 Brian P. Biller

San Narciso, Philippines: LT. Adrian F. LePendu, DC, and DT3 Cassandra M. Herring, treat a patient during the Philippines phase of Cooperation Afloat Readiness and Training (CARAT) 2005.

and Philippine navies as part of the Philippines phase of exercise Cooperation Afloat Readiness and Training (CARAT).

This was the 4th day of a scheduled 6 days of medical and dental civic action projects at various locations in the vicinity of Subic Bay during CARAT Philippines.

"I thought it was a great experience. I've never done anything like this before," said LT Adrian F. LePendu, DC. He added that he was surprised at what he was able to do without the normal, more clinical lighting he was used to and some of his normal surgical tools. "It helped me figure out what my capabilities are with such limitations," he added.

LT Erik J. Modlo, MC, said patients received examinations, medications, and care that were either routinely unavailable to them or unaffordable.

"Overall it was a success," said Modlo. "Being able to bring the kind of services we did from the dental/medical side to the Philippine people...the smiles were reward enough for me."

CARAT is a regularly scheduled annual series of bilateral military exercises between the U.S. and several Southeast Asian nations designed to enhance interoperability of the respective sea services. □

*—Story by JO2(SW) Brian P. Biller, Public Affairs Office, USS *Harpers Ferry*.*

Transformation Office to Streamline Military Health System

Service members can rest easy that their healthcare benefits will only improve with the chartering of the Military Health System Office of Transformation, the director of the new office said.

"It's important that service members and their families know that they are meant to be the focus of this patient-oriented system of the future," RADM John Mateczun, Navy Deputy Surgeon General, said. "There is no intent to lessen the healthcare delivery that they would see today."

Patients of the military healthcare system should notice a more patient-focused manner of delivering service, he said.

Eight people will make up the new office, two each from the Army, Navy, and Air Force, and two from the Tricare Management Activity.

Mateczun likened the changing system to building a house. "What is to be included in the house as well as the materials to be used must be decided upon," he said. "You still have to have somebody transform that into a plan so the contractors and subcontractors will know exactly what to do," he said.

"That's what the Office of Transformation's job is going to be. It's kind of like an architect. It's taking the building blocks that have been put together and then drawing the plan."

From that plan, Mateczun said, a team that includes the Office of the Secretary of Defense, the services, and the Tricare Management Activity will be able to build the new military health system of the future. They will get their raw materials, or building blocks, from the base realignment and closure process, local working group recommendations, and medical readiness review initiatives, he said.

"When all those building blocks come together, you'll have four or five different views of how the system needs to transform," he continued. "What this office will do will be to take all of those and put them together into a blueprint that the team will evaluate to make sure we build the system we need for the future."



RADM John Mateczun, MC

"That future," Mateczun added, "is a military health system that is efficient and can capitalize on the new technologies and drugs that are a result of a constantly changing American health system."

"We want to maintain the very high standard of both battlefield care and the healthcare systems we have today worldwide," Mateczun said. "But at the same time, we wanted to ensure we're doing it as efficiently as we can by being good stewards of the money the American people provide." □

—Story by Samantha L. Quigley, American Forces Press Service.

International Troop Team Brings Iraqi Clinics Hope

They were a squad of armed Marines, a detachment of Iraqi troops, a handful of soldiers, and a lone Navy doctor, loaded down with heavy green crates and traveling as a pack during the mid-morning hours.

To themselves, they were simply service members on a routine mission here, but to several children and overworked doctors in Fallujah, they were the harbingers of hope.

The joint Iraqi and U.S. troops were conducting Operation Medical Mentoring the morning of 26 August. Their goal: to aid the Iraqi government in healing the country's still-broken medical system by supplying northern Fallujah's clinics.



Photo by CPL Mike Escobar, USMC

An Iraqi doctor speaks with a local physician and LT Jared Vogler, MC, 1st Battalion, 6th Marine Regiment medical officer, during Operation Medical Mentoring.

Marines from Company B, 1st Battalion, 6th Marine Regiment; Iraqi soldiers; and other military personnel distributed supplies such as children's cough suppressants, blood pressure regulating medications, and as many as 100,000 Tylenol tablets to the city's Al-Jolan Primary Health Care Center and Dur al-Sement clinic. "The drugs we handed out were all brand new, donated by pharmaceutical companies and caring citizens in the U.S.," said LT Jared Vogler, 1st Battalion, 6th Marine Regiment's medical officer.

"The Iraqi Security Force brought their own doctor and helped provide security during the giveaway," he said. "These types of missions help foster positive interaction between them and local people." One of the biggest concerns local doctors continued voicing was ambulance movement during nighttime hours. Terrorists use ambulances to disguise their intentions. The movement of ambulances during night hours requires strict coordination with both drivers and security forces on edge. Although they are often inconvenienced by these rules, local doctors acknowledged their importance and remained thankful to the Iraqi and American Security Forces for performing missions such as Medical Mentoring.

"These medications will help us take care of the people because sometimes our clinic can see as many as 300 patients in 1 day," said Dr. Haytham Khaleef, Al-Jolan Primary Health Care Center's manager. "We can never have enough medication in this downtown Fallujah clinic, so it's wonderful to get help from the Iraqi and U.S. forces."

As the troops handed out life-saving supplies to the clinics and stuffed animals to the children outside, Vogler reported feeling a sense of accomplishment. "It's great to see all the people smiling and happy because of something we helped do," he stated. "Ultimately, we're all trying to do what's best for the people of Fallujah." □

—Story by CPL Mike Escobar, Public Affairs Office, 2nd Marine Division.

Inter-cultural Nursing Program offers Japanese Students View of American Nursing

In April 2005, plans began for a cross cultural nursing exchange between Naval Hospital Okinawa and the Hokubu Nursing School of Nago, Japan. Those plans were enacted in August 2005 when two Japanese nursing students began working at the hospital under the instruction of American nurses.

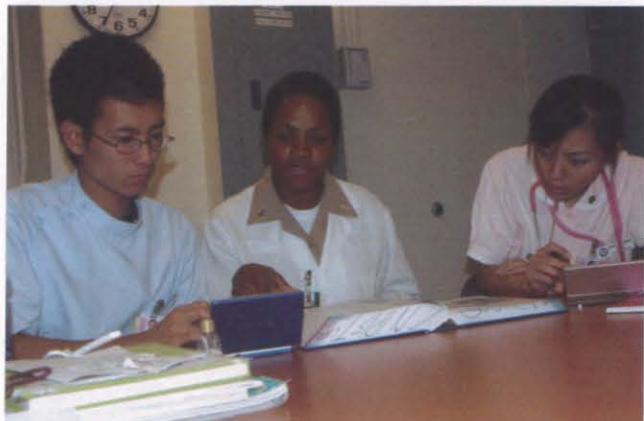


Photo by Amanda M. Woodhead

Takahiro Chibana (left) and Nanako Matayoshi (right) review couplet care procedures with Navy LT Martine Riché, a couplet care nurse at U.S. Naval Hospital Okinawa. Chibana and Matayoshi were the first two students from Hokubu Nursing School to participate in a 3-week exchange program.

Takahiro Chibana and Nanako Matayoshi were the first two Hokubu students to spend their summer break observing and learning the practical skills of U.S. nursing. The students reported to Camp Lester the first week of August and following 2 days of hospital orientation began their rounds in clinical areas like the medical-surgical ward, ambulatory procedure unit, couplet care, and the emergency department. In all, they rotated through 10 departments during the 3-week program.

"I now have a widened vision of nursing from my exposure to U.S. style nursing," Chibana said after 2 weeks of the program. "I am now more interested in the way the U.S. and other countries' nurses perform their duties."

The two students were selected from seven candidates, all of whom were required to write an essay defining why they would be interested in working with U.S. Navy nurses.

Toshiko Ikehara, Hokubu Nursing School director, explained that it not only took willingness on the students part, but also from the staff of Naval Hospital Okinawa. "They really opened their hearts to us, showed us outstanding leadership, and offered us an open welcome so the program would succeed," she explained.

CAPT Jan Carrio, NC, director of nursing services Naval Hospital Okinawa, echoed Ikehara's remarks with the excitement of incorporating a higher visibility for nursing island-wide. "This is an inter-cultural exchange to help each other learn for a better future. Our ultimate goal is to develop good nurses," she said. □

—Story by Amanda M. Woodhead, Public Affairs Office, Naval Hospital Okinawa.

Naval Hospital Great Lakes Corpsman Receives Purple Heart



HM3(SW) Carlos Miranda received the Purple Heart 15 September 2005, for injuries received on 17 April 2005 while serving with Kilo Company, 3rd Battalion, 25th Marines, 3rd Marine Division in Iraq. □

President Bush Awards Hospital Corpsman A Purple Heart

President and Mrs Bush visited Naval Medical Center San Diego (NMCS) on 30 August 2005 to thank sailors and Marines for their contributions to the war on terrorism.

The President addressed a group of hospital corpsmen who served meritoriously in Operation Iraqi Freedom, presenting, HN Alonso A. Rogero, with a Purple Heart for wounds received while serving with Kilo Company, 3rd Battalion, 5th Marines during Operation Phantom Fury in Fallujah, Iraq. □



CNO Awards Pensacola Corpsman Purple Heart



ADM Mike Mullen, Chief of Naval Operations (CNO), presented the Purple Heart to HM3 Jonathan D. Bryant during an all-hands call at the Naval Aviation Memorial Chapel aboard Naval Air Station Pensacola, FL, 19 August 2005.

Bryant received the decoration for injuries he received in combat while serving his second tour of duty with the 1st Marine Expeditionary Force (MEF) in May 2004. He was wounded while assisting injured Marines during a prolonged gun battle in Western Iraq.

"This sailor's action says a lot about the Navy and Marine Corps team," Mullen said. "There's no more responsible group, especially while in the field, than that of hospital corpsmen. The Marines you served with will remember you for years to come." □



HN Robert Martens, 20, of Queen Creek, AZ, died on 6 September 2005. Martens died of injuries sustained when the Humvee in which he was riding rolled over at Al Qaim, Iraq. Martens was assigned to the 2nd Marine Division near Baghdad. □

HM3 Christopher W. Thompson, USN, 25, of N. Wilkesboro, NC, was killed in action 21 October from an IED (improvised explosive device) explosion while conducting combat operations against enemy forces in the Al Anbar Province of Iraq.

Thompson was assigned to Echo Company, 2nd Battalion, 2nd Marines, 8th Regimental Combat Team, 2nd Marine Division, Fleet Marine Forces Atlantic, based in Camp Lejeune, NC. □

Corpsman Awarded Bronze Star for Fallujah Actions

HM3 Rakesh Sundram, a surgical technician student at the Naval School of Health Sciences (NSHS) in San Diego, CA, was recently awarded the Bronze Star for gallantry under fire, while serving with Weapons Company, 3rd Battalion, 5th Marines, 1st Marine Division in Fallujah, Iraq, on 23 December 2004.

He courageously followed an assault team to the second floor of the house being attacked by enemy insurgents, the Marines on the second floor knew that there was "a doc in the house." On his way up the stairs, he suffered multiple injuries from a detonated grenade that exploded underneath him. Even after sustaining such injuries, he was able to successfully evacuate several critically injured Marines to a casualty collection point.

While addressing the students of NSHS, flanked in formation by 3/5 Marines that were present to honor Sundram, LCOL Looney, Commanding Officer of 3/5 cited the famous quote by Chesty Puller, saying "There is no better business than being a Navy Corpsman." CDR Kurk Rogers, director of Surgical Specialty Schools, stated "Experience is a great teacher. Knowing this, he has graduated from one of the greatest schools in life before ever completing the program he is currently enrolled in at the NSHS, San Diego," Humbled by the award, Sundram said "I was just doing my job and if found in a similar situation, any other corpsman would have done the same."

Sundram will graduate from NSHS, San Diego, Surgical Technician School in November 2005. His future aspirations are to become a Certified Registered Nurse

Anesthetist. The actions performed by Sundram that day attest to the bravery and dedication of hospital corpsmen throughout Navy medicine and among the Navy and Marine Corps team. □

—Story by LTJG Janette Arencibia, Head, Facilities Department, NSHS, San Diego, CA.

Advanced Cardiac Life Support Kits Hit the Fleet

In early October, the Maritime Force Protection Command (MARFPCOM) began distributing 100 of their newly developed Advanced Cardiac Life Support (ACLS) kits to independent-duty corpsmen throughout the fleet.

The ACLS kits are the product of a collaborative effort between Navy personnel and civilian-sector partners to develop what MARFPCOM Force Medical Officer CDR Michael S. Weiner calls the "one-source solution for ACLS."

"This is the future," Weiner said of the kits, which are packed in durable, portable containers. "You could drop this thing from a three-story building, and it would be just fine."

The kit features medical equipment comparable to kits found trailing presidential convoys and in airliners. Each is stocked with gear ranging from personal Point of Injury medical care kits to automated external defibrillators (AED).

Weiner said the new ACLS kits were born out of necessity. Until the kits were developed, independent duty corpsmen would struggle with awkward pieces of equipment when time mattered most. An all-in-one innovation simplifies procedure, helping to save lives.

"Our goal is to align medical care throughout the world and to standardize treatment for all service members," he said, "no matter where they happen to be in the world." Weiner speculates that the kit could prove extremely valuable to sailors in the diving community, for example, who are more at risk for heart failure by the nature of their work.

"The level of care that patient is going to get is equivalent to what they'd get in a hospital setting. That's what's so incredible about this," Weiner said. "It's standard, it's simple, and I think it's pretty elegant."

—Story by JO Christopher Okula, Fleet Public Affairs Center Atlantic

Aviation Mishap Investigation Methods Applied to Patient Safety

What can Navy medicine learn from the aviation community? Some valuable lessons according to CDR Kenneth Green, DC, who provides dental care to Helicopter Anti-submarine Warfare squadrons out of a NAS Jacksonville hangar clinic.

Green was once a Medical Service Corps officer who worked as a Navy aerospace physiologist and aeromedical safety officer. He was also one of the Navy's first aircrew coordination instructors. As a safety officer, Green's job was to help prevent naval aircraft mishaps but he also found himself involved in mishap investigations. He observed that the principles and "lessons learned" in this work could be applied to any group, particularly medical teams.

Green left active duty in 1996 to set up his own consulting business, CounteRisk Technologies, Inc. The firm offered training solutions utilizing the aviation safety, human factor, and crew coordination principles he had learned as a safety officer.

He returned to active duty in 2003 to become a Navy dentist. He served with Naval Dental Center Southeast until the Navy-wide merger of the medical and dental communities in January folded his command into Naval Hospital Jacksonville.

Recently, the principles and lessons he learned as a safety officer were to prove invaluable. Naval Hospital Jacksonville's Patient Safety Committee asked him to develop a training program to address Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) recommendations from a recent "Sentinel Event Alert." Such alerts are issued to all JCAHO accredited medical facilities when the organization becomes aware of healthcare procedures that could put patients at risk for death or injury. This particular alert concerned perinatal care for infants.

The Patient Safety Committee, including Green, realized that specific team training would be needed to implement JCAHO's recommendations. And Green had the program to fill the bill.

"I already had a training syllabus in place that I developed while working as a consultant. That syllabus, 'Critical Care Crisis Communication,' could, with just small format changes, accommodate the perinatal departments at Naval Hospital Jacksonville," Green said.

"The training consists of background and didactic material very similar to what any military or commercial airline pilot receives to make them aware of the role human factors play in mishaps. Additionally, instruction is offered in techniques to improve communication and decision-making through the understanding of team and organizational dynamics and their inherent barriers to successful communication. The training is capped off with real life scenarios, acted out in the operating room. The instructor then reviews the team's work pointing out areas for improvement for the team members, once a real situation arises," Green explained.

"We've tried to make this a monthly program. To date, I've trained about 60 staff members, from physician to corpsman, O-6 to E-3, military, civilians, and the range of clinical departments that make up our perinatal team. The goal is to provide initial training for all members of the departments involved, and then possibly refresher/new check-ins training periodically throughout the year," Green said. If contracted to a private consultant firm the cost of training to date would have exceeded \$50,000.

"Joining the Naval Hospital Jacksonville team as we integrated with the medical community has been positive for me," Green said. "It's given me the opportunity to expand my time in a field that I'm passionate about and deeply believe in; safety, risk management, and patient safety in particular," he added.

His being a Dental Corps officer has not been an issue with his Medical Corps trainees. "I tell them I am not here to teach them medicine," Green explained. "That's their expertise. While I've been in the operating room as a clinician and was trained in anesthesiology, I've made sure I'm familiar with the particular fundamental emergencies they must deal with in the perinatal arena. My area of expertise and focus for this training is human factors analysis and team crew coordination, communication, and decision making improvement. My purpose is to make them aware of the threats they face in the team environment and to offer solutions they can use in real time to prevent mishaps or other untoward events," he said.

Green's expertise on this subject is becoming recognized outside the Navy. He recently presented a paper, "The Operating Room as a Cockpit: Human Factor and

Aviations' Lessons Learned for Improving Crisis Communication and Decision Making in High Risk Critical Care Situations," at the international conference for Healthcare Systems Ergonomics and Patient Safety in Florence, Italy. He spoke on the same topic at a patient safety forum at Harvard University this summer.

"This trend to use aviation safety programs in medicine is virtually sweeping the country. And at any patient safety or hospital risk management conference, you can find someone who is speaking about the benefits of this style of training or promoting aviation styled training for medical teams," Green said. "Many studies linking the two fields have been done," he said. For instance, the VA has hired its own expert, physician and former astronaut Dr. Jim Bagian, to run their patient safety program. Bagian instituted similar aviation styled programs at the VA.

Green said he would like to see the program in place in Naval Hospital Jacksonville's perinatal departments expanded to cover naval hospital personnel in all the critical care medicine departments, intensive care units, the emergency room, and the operating room, etc.

He noted that there are programs being developed and tested by DOD level patient safety program planners, which will hopefully standardize across the services—a crew resource management, aviation styled program of instruction for all medical team training. Green is preparing for a tour at BUMED starting in November. There, he also hopes to work on these issues.

For now, Naval Hospital Jacksonville has a jump on that future by taking advantage of the resources of one of its own.

—Story from Public Affairs, Naval Hospital Jacksonville, FL.

Navy Captain Soaring to New Heights

With more than 28 years on active duty as both a Hospital Corpsman and Medical Service Corps officer, CAPT Charles "Chuck" Rhodes, an environmental health officer with the Navy Environmental Health Center in Portsmouth VA, has experienced much of what the Navy has to offer by way of challenging assignments and interesting duty stations. However, it's his off-duty interests that truly raise an eyebrow. A self-proclaimed "adrenalin junkie," CAPT Rhodes has a long history of participating in thrill sports. In fact, he was an avid ski jumper and rock climber before being introduced to hang gliding in 1974. According to Rhodes, "Somehow I knew I had to try hang gliding but it was not until early 1974, and while living in Arizona, that I was able to finally take hang gliding lessons. The second I left the ground on my first ground skimming flight on a "Chandelle" standard rogallo type hang glider in March 1974 off a small 75 foot high hill near Prescott, AZ, I knew I was hooked. Taking advantage of every opportunity to fly and talking my girlfriend (now my loving wife) into loaning me \$400, I was able to purchase my first hang glider."

The hobby evolved into a passion for Rhodes, who soon obtained his professional hang glider pilot instructor rating. Eventually, he opened up his own hang gliding shop called Adventure Sports and Flight Unlimited in Flagstaff, enabling him to immerse himself in his hobby full-time. The pinnacle of his hang gliding exploits, however, occurred on 9 May 1976 when he and a team of four other pilots became the first hang gliders to fly into the Grand Canyon from a "foot launched" approach 3,700 feet above their designated landing area on the Tonto Plateau far below. Each flight, which lasted between 10–15 minutes, carried the pilots approximately 1.5 miles out over the canyon, ultimately securing them a place in hang gliding history. Once on the ground, the adventure entered "phase two," as the aviators had to pack up their gliders for the long journey back up the canyon by way of the Bright Angel Trail to their point of origin. "We had to fold up our gliders after landing and carry them back out on our shoulders. That was not fun but worth the opportunity to have been lucky enough to have flown into such a spectacular place," said Rhodes. "Since that time a num-

ber of hang glider pilots have flown cross-country from hang glider launches farther south, crossed the Grand Canyon, and flown back, landing on the South Rim. They were normally at altitudes of 12,000-14,000 feet during the crossing and thus way above the canyon. We were able to actually fly into the Canyon, alongside the great sandstone cliff walls, and out over the inner gorge and Colorado River. Definitely a different experience!"

Despite his dedication to the sport of hang gliding, Rhode's professional aspirations had him heading in a different direction. In the summer of 1977, he entered the Navy from his hometown of Glendale, AZ. Nevertheless, his commitment to the Navy did not curb his enthusiasm for the sport of hang gliding. In 1982, he purchased a Mitchell Wing hang glider from LCDR George Worthington, a retired Navy pilot and veteran of World War II and Korea. While flying this model wing George set the very first official Fédération Aéronautique Internationale (FAI) world record in the sport of hang gliding in 1977. He then went on to set five additional FAI official world hang gliding records with this particular aircraft in the late '70s. In fact, after purchasing the wing from Worthington, Rhodes himself set several unofficial Arizona hang gliding records with the Mitchell Wing. "I did set the then unofficial State of Arizona record for CLASS II (rigid wing) hang gliders while flying the Mitchell Wing in 1983 cross-country from Mingus Mountain, AZ, to Phoenix, AZ. This was for a cross-country flight of 75 miles, and for an altitude gain of over 9,300 feet above Mingus Mountain take off elevation to 17,500 feet above sea level, while thermalling up south of Mingus on the same flight. My longest hang glider flight ever was 103 miles while soaring cross-country from Horseshoe Meadows in the Sierra Nevadas, approximately 40 miles north of China Lake, CA, north past Bishop, CA, over the Owens Valley, and eventually landing in Nevada just past the north end of the White/Inyo mountain range east of the Sierra Nevadas. This was also my longest hang glider flight, time wise, at approximately 6 hours, 10 minutes in the air," noted Rhodes.

Since enlisting in the Navy as a corpsman, Rhodes has accomplished significant professional achievements, including completion of three masters degrees, including one in Public Health, obtaining his commission as a Medical Service Corps officer in the field of environmental health, and ultimately, his promotion to the rank of captain in 2002. Throughout his career, which has taken him to both Europe and Asia, CAPT Rhodes has managed to squeeze in a hang glide or two. In fact, he even mixed a little business with pleasure when, in 1988, he reenlisted an Air Force Tech Sergeant, also a hang glider pilot, by



Photo by author

CAPT Rhodes with his collection of hang gliding photos and awards.

air-to-air radio while both were flying hang gliders over Okinawa, Japan.

Unfortunately, it's the nature of the beast that CAPT Rhodes' increasingly busy schedule precludes him from flying as much as he'd like to. "My busy Navy career leaves me little time for Mitchell Wing flying. Continuing to transport the wing around the country with every Navy move, storing it, and then not having time to fly it, leads me to thoughts of selling or donating it to a museum," noted Rhodes.

His generous nature and knowledge of the historical significance of the Mitchell Wing and wanting it preserved for future generations of rigid wing hang glider and ultra light sailplane enthusiasts made his decision fairly easy. As a result, CAPT Rhodes donated this particular Mitchell Wing, a six time world-record setting hang glider, to the Experimental Aircraft Association Museum in Oshkosh, WI, on 27 June 2005.

CAPT Rhodes now gets his thrills from his other favorite past time, wind-surfing off the Virginia and North Carolina coast. While it doesn't present the same sense of exhilaration as hang-gliding, there are similarities. "Both sports offer unlimited challenges and unique experiences close up with nature's raw power requiring strong technical thinking, skill, and ability to harness the wind to soar through the skies and fly across the water," added Rhodes. Certainly, CAPT Rhodes would like to see more people involved in the sport of hang-gliding. The sport has evolved considerably since the 1970s, where glider designs were more primitive and dangerous, missing the safety and sophisticated aerodynamic design and navigation instrumentation that today's hang-gliders have. Modern gliders are rigorously tested to demanding airworthiness stress and safety factors. Also, pilots have the benefit of greatly improved safety features including emergency parachutes capable of returning both pilot and

glider safely back to Mother Earth. In spite of the dangers and inherent risks associated with the sport, Rhodes was neither deterred from flying, nor seriously injured. "I've never received any major injuries hang gliding but, like most, have suffered a few scrapes and bruises from less than optimal landings," said Rhodes.

For more information on the sport of hang gliding, go to the official web site of the United States Hang Gliding Association: <http://www.ushga.org/>

—Story by Hugh Cox, Public Affairs Office, Navy Environmental Health Center, Portsmouth, VA.

A Longitudinal Study of Dental Disease, Treatment, and Outcomes in Navy and Marine Corps Personnel

LCDR John W. Simecek, DC, USN (Ret.)
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Renee L. Ahlf, RDH, MEd

Soldiers, sailors, airmen, and Marines are required to perform their duties within environments that are often plagued with adversity and danger. In order to determine if dental emergencies (DE) are influenced by these extreme conditions, investigators have studied military personnel during combat situations, peacekeeping efforts, combat training exercises, and deployments at sea. Previous research reveals that the majority of DE experienced during deployment or in garrison are the result of acute exacerbation of chronic dental conditions or failure of existing restorations. Mahoney and Coombs reviewed the literature and concluded that the reported rates of dental casualties exhibit considerable variability and depend on the type of deployment and degree of dental fitness of the force.(1)

Ludwick and colleagues reported an average monthly incidence of 13.1 DE occurring per 1,000 Navy and Marine Corps personnel serving in Vietnam from July-December 1970. From these data, it is estimated that the incidence of DE was 157 per 1,000 personnel per year

(PPY).(2) Another study by Deutsch and Simecek reported an incidence of 149 DE per 1,000 PPY among Marine personnel deployed to Operation Desert Storm during the period of August 1990-April 1991.(3)

Investigations of DE occurring in Navy personnel during deployments at sea have been reported. Leonard compared the DE rates of sailors on submarine deployments during 1967 and 1990. In 1967, 120 sailors experienced DE during 43 submarine patrols, while only 67 sailors suffered DE during 79 patrols in 1990. These data can be used to estimate incidence rates of 99 and 26 DE per 1,000 PPY during 1967 and 1990, respectively.(4) Deutsch and Thomas reported that 154 DE (26 DE per 1,000 PPY) were experienced during 240 submarine patrols occurring from 1997-2000 and that DE accounted for 9.4 percent of all medevacs.(5)

During Fiscal Year 2000, The Life Science's Research Office, Bethesda, MD, (LSRO) submitted an assessment of dental research programs within the armed services. Two of the general research requirements recognized by

LSRO as applicable to the Navy and Marine Corps read as follows: (1) "develop programs to assess risk and prevent oral diseases and dental emergencies in operational forces (to include an evaluation of the present DOD dental classification system)" and (2) "develop and evaluate the effectiveness and efficiency of dental care delivery systems and procedures in a military setting." Additionally, a stated objective of the Strategic Plan for Navy Dentistry is the validation of the effectiveness of the current Navy Dental Classification Standards in predicting operational dental readiness by studying unplanned dental encounters and treatment required for deployed units.

Due to the scarcity of longitudinal research using adult populations, an investigation was designed to identify variables that would allow the accurate prediction of those personnel who will develop DE, as well as identify those who are at highest risk to develop dental disease. To satisfy the requirements of LSRO and Navy dentistry, the Naval Institute for Dental and Biomedical Research (NIDBR) commenced a retrospective cohort study in 2001. Data necessary to calculate DE among the three dental classifications and to identify significant predictors of DE have been collected from dental records of Navy personnel in-processed during the calendar year 1997, Marines in-processed during calendar years 1999 and 2000, and Marines deployed to Operation Iraqi Freedom II.

The majority of dental disease is concentrated in a small segment of the population. Targeting preventive and risk management programs to those who are susceptible will enable the provision of intensive programs for those at highest risk and reduce unnecessary treatment for those at lowest risk. Data from this investigation will enable quantification of treatment needs and determination of emergency rates during an extended period. Data collected will also identify variables that will allow the more accurate prediction of DE and dental disease progression. The predictive variables will be used to develop more

sensitive and specific screening and diagnostic standards that can be used by Navy dentistry to target those sailors and Marines requiring specialized preventive and treatment programs. Additionally, the results of this study will enable researchers to determine the procedures that are most effective in halting dental disease progression and reducing the incidence of DE. Ultimately, this will lead to improved oral health and operational dental readiness of Navy and Marine personnel.

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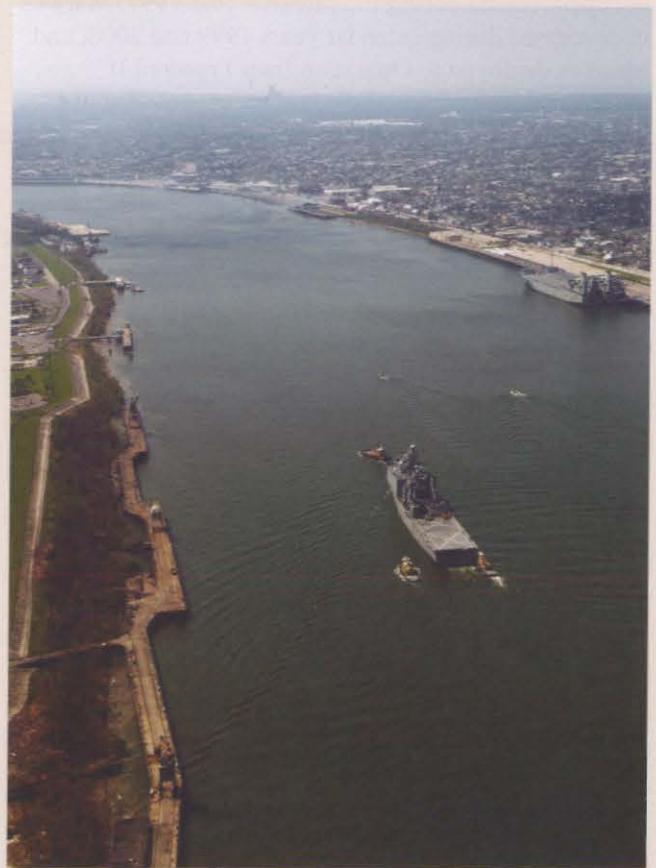
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Sailors await the arrival of **USNS Comfort** (T-AH 20) as it prepares to make port in Mayport, FL, to take on supplies on their way to aid victims of Hurricane Katrina. Photo by Photographer's Mate Airman Nicholas A. Garratt, USN.



A member of FEMA Urban Search and Rescue Task Force rushes a baby to a Navy air crewman prior to being medically evacuated from New Orleans. Photo by Jocelyn Augustino.



HN Maria Armour prepares to immunize a patient in the medical department aboard **USS Harry S. Truman** (CVN-75) after Hurricane Katrina. Photo by JO3 Kat Smith, USN.

USS Tortuga (LSD-46) makes her way up the Mississippi River to New Orleans to provide assistance after Hurricane Katrina. Photo by PH2 Michael B. Watkins, USN.



HM3 Vin Le (left), and LCDR Robert Guardiano (right), MC, medical staff from USNS Comfort (T-AH 20), welcome a young girl before treating her at a makeshift clinic in Biloxi, MS. Photo by JO Heather Weaver, USN.



Air Force COL Norma Allgood and her 15-month-old son are helped from an aircraft by LT Eric L. Anderson, MC, at NAS Jacksonville. Allgood and her family were medically evacuated from the Gulf Coast after Hurricane Katrina. Photo by Miriam S. Gallet.



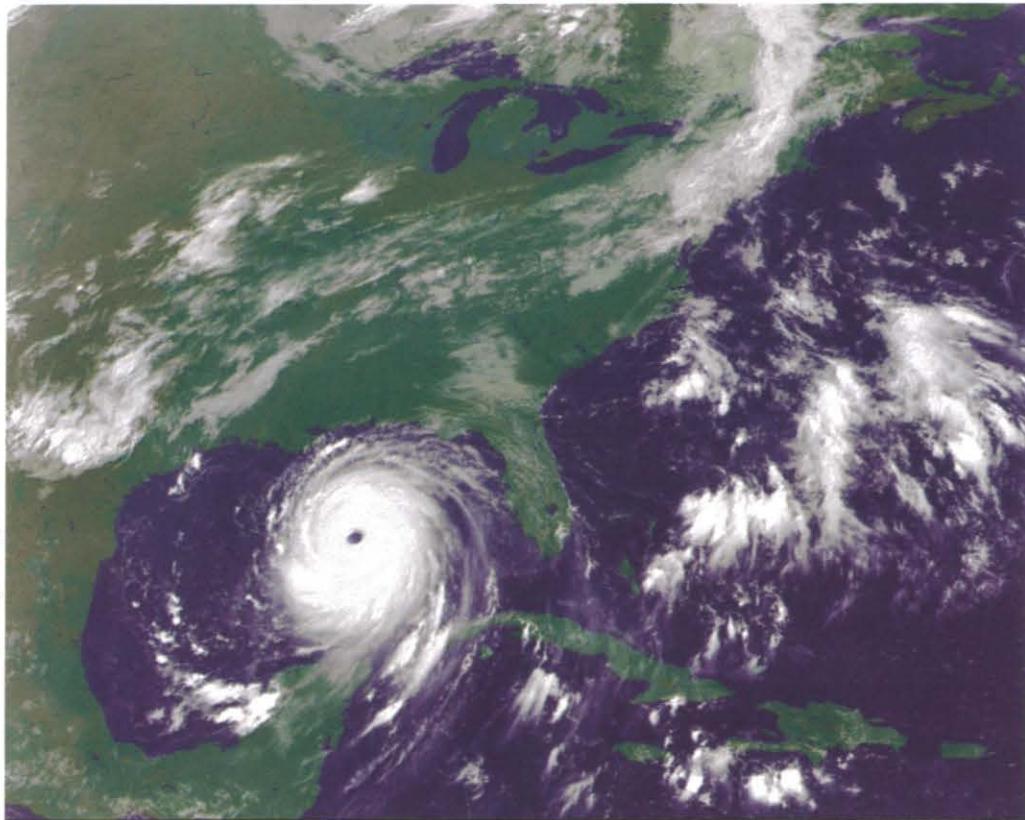
USNS Comfort (T-AH 20) moors at the Port of Pascagoula to provide medical assistance to the victims of Hurricane Katrina. Photo by PH2 Michael B. Watkins, USN.



Navy Personnel assigned to Casualty Receiving and Treatment Ship Team Eight from Naval Hospital Jacksonville, assist in setting up a field hospital at Naval Air Station Joint Reserve Base New Orleans. Photo by Photographer's Mate Airman Jeremy L. Grisham, USN.

Hurricane Aftermath Navy Medicine Responds

Photo from NASA Goddard Space Flight Center



Satellite image showing the status of Hurricane Katrina at 7am, EST, 28 August 2005.

Katrina, a three-syllable girl's name of Greek/Norse origin, meaning one of purity; beloved.

Katrina was no pure, beloved lady as she blew across south Florida and headed for the Gulf of Mexico. Picking up strength over the warm waters, Katrina swished

her skirts and barreled into the Gulf Coast screaming like a runaway freight train leaving the tracks.

Winds in excess of 145 mph with stronger gusts hammered at all things standing, taking down whatever they could. Storm surges of 18-28 feet followed the worst of

the storm, washing away whatever the winds left standing.

Damage

Navy facilities in the path of the storm were hit hard. Navy Branch Health Clinic, Naval Station Pascagoula, MS, was closed due to major flooding. Navy Branch Health Clinic, Naval Construction Battalion Command, Gulfport, MS, experienced flooding and water in the building but was able to run on generator power. Generator power was also available at the three Navy clinics in New Orleans.

Despite loss of power and damage to facilities, the medical teams at all clinics continued to provide care however they could. Staff at Pascagoula cared for more than 350 persons in an off-base evacuation shelter. A Gulfport medical staff of 15 continued to care for the Seabees and more than 1,300 evacuees in a base shelter. The night of the storm, four corpsmen from the Gulfport base, along with police officers and Reserve Seabees, went into the Gulfport area and rescued

more than 100 people. The morning after Katrina passed through they mounted a rescue mission to the Armed Forces Retirement Home in Biloxi, entering the home and treating the injured.

Overall, the clinics in New Orleans cared for more than 350 people in damaged clinics manned by skeleton crews and living on upper floors or in the clinics themselves. On 6 September a chief hospital corpsman from one of the New Orleans clinics and corpsmen from Naval Hospital Pensacola joined forces with the medical staff of the 82nd Airborne to evacuate a nursing home, Tulane and Charity hospitals, and help at the Superdome. They also performed sick call for the troops and boat patrols and provided some preventive medicine such as health and comfort inspections.

Relief

In reality we cannot be called the cavalry, but our ships are bigger than their horses and we arrived en masse. Fifteen ships including the aircraft carrier USS *Harry S. Truman* (CVN-75), and over 63 aircraft operating out of six different locations.

USS *Bataan* (LHD-5) was already in the area, on her way back to Norfolk, VA, from an exercise in Panama. She was sailing off the Texas coast and rode out the storm in 12- to 14-foot seas. On Tuesday, after the storm, pilots from *Bataan* started rescuing stranded residents and delivering supplies. With a

Navy doctor onboard, *Bataan's* landing craft LCU-1656, loaded with food and water, started the 90-mile trip up the Mississippi River to New Orleans. Forty miles short of her destination, she was called back when *Bataan* was ordered to Biloxi, MS.

On Friday, 2 September, 84 doctors, nurses, and technicians from Naval Hospital Jacksonville's CRTS 8 team (Casualty Receiving and Treatment Ship Team) embarked on *Bataan*. One day later, 56 members left the ship to take medical support to New Orleans Convention Center, International Airport, and Biloxi High School.

By 9 September crew members from *Bataan* and *Whidbey Island* (LSD-41) were cooking two hot meals a day at the Biloxi High School for homeless residents while a Navy medical team pro-

vided free inoculations and limited emergency care. A second medical team consisting of an internal medicine physician, two nurses, a respiratory therapy technician, and two corpsmen were at the high school to take care of patients with respiratory illnesses.

Six corpsmen from USS *Shreveport* (LPD-12) working first out of a pierside warehouse, then an emergency operations center at a local oil refinery, administered immunizations to over a thousand relief workers.

USS *Iwo Jima* (LHD-7) raced down the East Coast and into the Gulf of Mexico in 3 days, arriving on 3 September to join relief efforts, and docked in New Orleans on the Riverwalk. Over her stay, *Iwo Jima* was to become many things to many people: A command center, airport, hospital, restaurant,



Damage to the family housing area at Naval Construction Battalion Center, Gulfport, MS.

US Navy photo



USS Iwo Jima (LHD-7) CO, CAPT Richard S. Callas, USN, (left), mans one of the several grills for relief workers in downtown New Orleans.

and hotel, even providing a bed for President Bush one night. With most of the airports in the area heavily damaged, the flight deck operated around the clock, sending and receiving helicopters from all over the U.S.

The first patient arrived onboard just minutes after the ship docked, an elderly man with a stab wound. The medical team sprang into action and performed life-saving surgery. The medical department was staffed with over 100 medical personnel, 85 of whom came from Naval Medical Center, Portsmouth, VA.

Medical casualties came onboard by stretcher and ambulance, and still others by boat. Other ships that were already in the area transferred their overflow patients to *Iwo Jima*.

Arriving 4 September, USS *Tortuga* (LSD-46), docked pierside at Naval Support Activity, New Orleans. Although her medical department was not as large as

some others, *Tortuga* turned no one away, performing whatever medical aid was necessary before transferring patients to other facilities aboard *Iwo Jima* and *Comfort*.

Tortuga not only helped the human side of the tragedy but took

on the animal side as well, building a makeshift kennel named "Camp Milo and Otis." The facility housed 90 dogs, 8 cats, 1 rabbit, 1 guinea pig, a pair of parakeets, and a flightless pigeon.

USNS *Comfort* (T-AH 20) docked at Pascagoula, MS, on 10 September. The 200-plus *Comfort* medical staff was augmented with 82 professional medical volunteers from Project HOPE.

Few victims showed up at first, so the captain sent officers ashore to publicize that *Comfort* was there and what she could offer. They found a walk-in, makeshift clinic in a shopping mall, run by four ER nurses from Illinois. Seven nurses had come down from Illinois; three were working in a hospital, and the other four had set up the clinic. They were in desperate need of supplies and staff. *Comfort* provided hot showers for them, as well as the supplies and staff.

The nurses in turn teamed with medical personnel and went to economically distressed parts of



Medical personnel land aboard USS Bataan (LHD-5).

the area to take care of victims and to let them know that *Comfort* was there.

Over the next days medical teams from the hospital ship walked through neighborhoods treating cuts, burns, insect bites, and broken bones. The ship also replaced eyeglasses and medications. Along with the clinics onboard these neighborhood calls reached more patients than any of the staff imagined.

In the 10 days she was in the area *Comfort* treated over 1,200 patients aboard ship and hundreds more in outlying clinics and neighborhood calls. While attending to these patients, members of the crew built a fully operational primary care clinic at Biloxi. Using donated supplies and scavenged debris, the team rebuilt a damaged garage, separating the large room into sections for exam rooms. *Comfort* also provided hot showers, meals, and beds to hundreds of relief workers.

Naval Air Station Meridian, MS, accepted evacuees from the storm-torn area, housing patients in an air-conditioned, 500-bed hospital field tent, with another medical unit set up in a base hanger.

Naval Hospital Jacksonville and Naval Hospital Pensacola took in displaced persons. Naval Station Mayport not only took in over 800 sailors from Pascagoula but the three ships they were assigned to—USS *John L. Hall* (FFG-32), USS *Thomas S. Gates* (CG-51), and USS *Stephen W. Groves* (FFG-29).

Aftermath

Navy relief activities evacuated well over 6,000 residents, medevaced hundreds, delivered hundreds of thousands of pounds

of food, water, and supplies, and provided showers, hot meals, beds, and encouragement to hundreds of relief workers.

Although heavily damaged, by default, Naval Branch Health Clinic at Gulfport, MS, became the major medical treatment facility in the area. The large medical facility at Keesler Air Force Base sustained so much damage from flooding that it has been shut down except for emergency services operating out of tents in the parking lot.

By design, the clinic is a primary healthcare facility for the Construction Battalion Center's Seabees and their families. One of five damaged Navy health facilities, it was stretched to its limits by Keesler's overflow of eligible population. To supplement the level of patient load and the type of patients being seen, Naval Hospital Pensacola sent several members of the hospital staff as well as reserve personnel.

As of 21 September NBHC Pascagoula is closed, operating a makeshift clinic at base housing. NBHC Gulfport is operational and providing most of the military medical care for the Mississippi-Louisiana coast.

In New Orleans, the East Bank clinic is partially operational, with two to three Navy personnel staffing it. NACC clinic on the West Bank is closed, with mold, wet carpeting, and walls. Again, two to three Navy personnel man it and live on the upper floors. The Belle Chasse clinic is partially operational with about half its staff working and living in the clinic.

Naval Hospital Pensacola has been ferrying supplies, medications, and relief personnel to all five clin-

ics. Some of the Pensacola personnel go back and forth; some stay at the clinics.

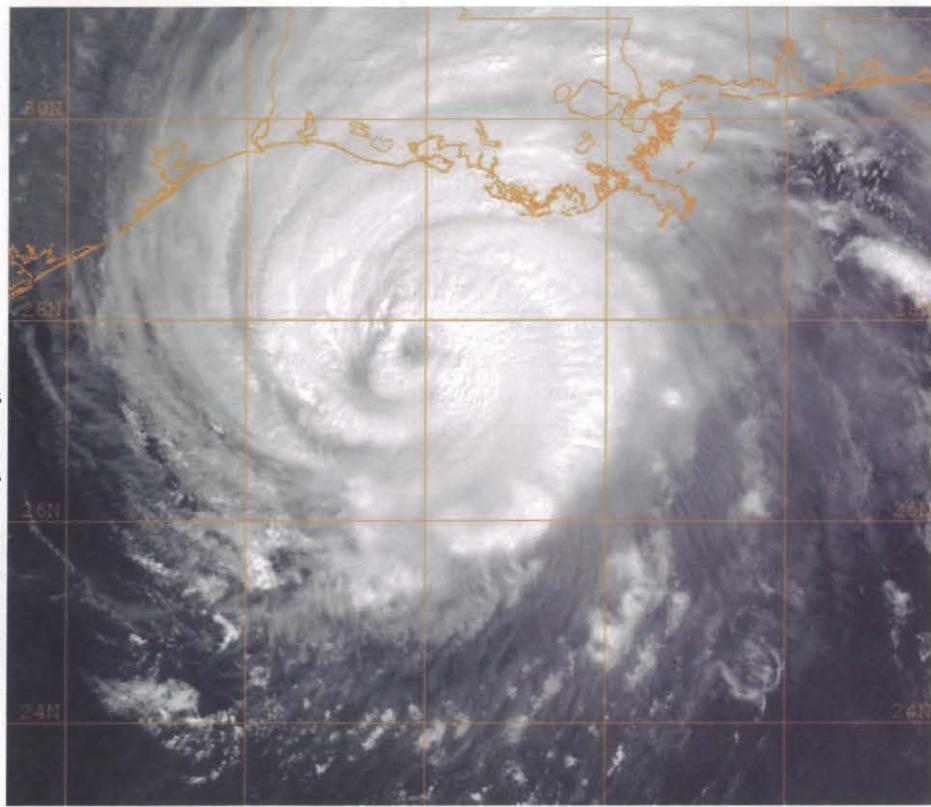
Round Two - Hurricane Rita

On 21 September the Commander of Navy Region South ordered evacuation of naval installations in south Texas. This included Naval Air Station Corpus Christi, Naval Station Ingleside, Naval Air Station Kingsville, Navy clinics at Ingleside and Kingsville, and Naval Hospital Corpus Christi. Texas officials called for massive evacuation, resulting in millions leaving the Texas coast.

Six Navy ships that had responded to Katrina—*Tortuga*, *Grapple*, *Iwo Jima*, *Shreveport*, *Patuxent*, and *Comfort*—moved east to ride out the storm, some in 12- to 13-foot seas, and were available post-storm to offer aid to communities along the Texas and Louisiana coast.

Rita proved to have less impact than Katrina, but still managed to leave destruction and devastation in her wake. Shortly after Rita passed through, helicopters from *Iwo Jima* and Randolph AFB began transporting survivors to safety, among them 1,300 survivors. *Iwo Jima*, anchored 25 nautical miles from Sabine Pass, supplied medical assistance to victims that could not get help at local hospitals. The 85-member medical team for NMC Portsmouth remained on *Iwo Jima* to supplement their medical department and support *Comfort*.

On 28 September *Comfort* moored at New Orleans to perform duties as a Level I trauma center, taking over most of the trauma duties for the heavily damaged Charity Hospital. Louisiana State



Satellite image showing status of Hurricane Rita at 8:00am EST, 23 September 2005.

University, which runs Charity hospital, supplemented *Comfort's* medical staff with doctors, nurses, and technicians.

On 30 September members of the medical team from Naval Medical Center Portsmouth, returned from their relief efforts along the Gulf Coast. The 11-member mental health team and 58 medical staffers were embarked on *Iwo Jima*, augmenting her surgical department. Nineteen other medical staffers from Portsmouth remained deployed with *Comfort*.

Iwo Jima, Shreveport, and *Tortuga* returned to Norfolk Naval Station the 2nd and 3rd of October. The three ships were among 19 Navy and Military Sealift Command ships that provided help and relief in the wake of Hurricanes Katrina and Rita.

Comfort left New Orleans on 8 October after nearly a month on the Gulf Coast, she docked at Baltimore on 14 October. □

Three Navy corpsmen received the Army Achievement Medal for their assistance with the Army's 82nd Airborne's humanitarian relief in the aftermath of Hurricane Katrina. HMC Shawn Frederick of Naval Ambulatory Care Clinic, New Orleans, and HM2 Thomas Santos and HM2 Scott Moore of Naval Hospital Pensacola were awarded the medals on 13 September. They aided an Army doctor, physician assistant, and 10 medics with relief efforts at a nursing home, the Superdome, and Convention Center, as well as Tulane and Charity hospitals, and walking sick calls for the relief troops.

HIM1 Jonathan Platner and HM1 Michael Brown were awarded Navy and Marine Corps Commendation Medals for their services after Hurricane Katrina. They joined 10 local police officers and a Reserve Seabee unit, went out into the devastated area, and rescued more than 100 people. The following morning, they joined the mission to aid the Armed Forces Retirement Home in Biloxi, MS. On day 3 they made their way to Pass Christian, MS, carrying 35 gallons of water and medical supplies to help victims there.

—Story by Janice Marie Hores, Assistant Editor, *Navy Medicine*.

The GMO in Iraq

Am I Ready for This?

LT Brian Martin, MC, USNR

LT Joe Buglisi, MC, USNR

LT Mark Morgan, MC, USNR

LT Christopher Nevarez, MC, USNR

LT Lisa Rivera, MC, USNR

Level I care units and how they are named vary slightly depending on the type of Marine mission being supported. Marine Corps forces are organized into four elements; Command Element (CE), Ground Combat Element (GCE), Air Combat Element (ACE), and the support element, or Forces Service Support Group (FSSG). All are supported by individual aid stations. The aid station duties are tailored to fit the specific medical needs of these missions. For example, some of the Level I units have to support missions such as EOD (explosive ordnance disposal). The aid stations supporting the ACEs also provide aviation specific tasks.

The aid station is traditionally defined as a medical unit that is responsible for providing direct medical support to a company or platoon with a physician and corpsmen. The typical aid station may have 1 to 3 providers and 10 to 20 corpsmen. In addition to the medical officers, a few of the aid stations also have an independent duty corpsman (IDC). The staff provides medical care and returns the patient to duty, or forwards the patient to higher level of care. All Level I units may provide laboratory, pharmacy, radiological services, or any com-

bination of the above depending on the mission and resources. The daily functions of the Level I units comprise four basic responsibilities: health maintenance, casualty collection, treatment and triage, and casualty evacuation. Health maintenance involves routine sick call (a walk-in clinic), records maintenance, immunizations, and certain special physical exams. Casualty collection involves deploying to a site, triaging, initial treatment, and evacuation of patients to a higher echelon of care. All Level I units at Camp Taqaddum are part of the mass casualty team. Each unit is responsible for a specified area of the camp as the first responder.

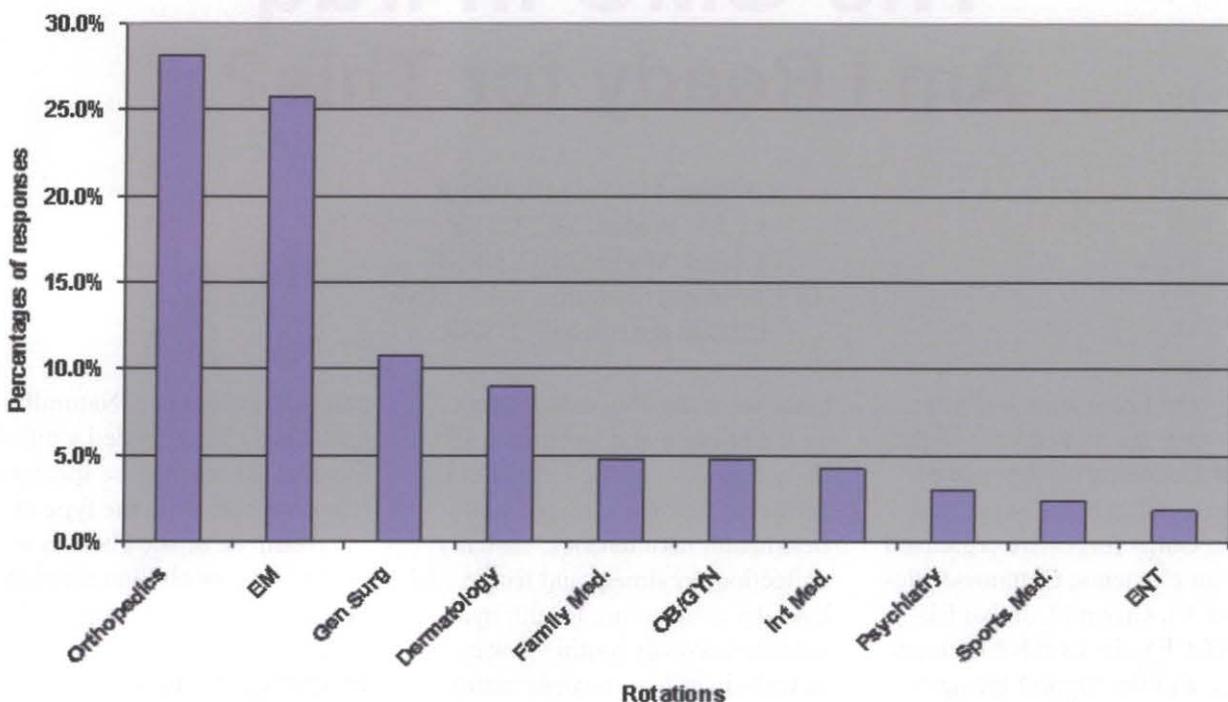
The GMO

The general medical officer (GMO), alongside the corpsman, is the most basic and essential aspect of the aid station. Straight out of postgraduate year one, a GMO is assigned to one of several operational forces—flight surgery, underwater medicine, shipboard tour, or one of the many Marine units. The particular unit to which he or she is assigned largely governs the experiences this young doctor will face. Each doctor assigned to a Level I medical unit brings with him/her a certain fund of knowledge and

practical experience. Naturally, each GMO has attended a different medical school and the specialization continues with the type of internship he or she chooses at one of the Navy or civilian training hospitals. The internships include internal medicine, psychiatry, family practice, transitional internship (a mixture of various specialties), surgery, pediatrics, and OB/GYN.

When faced with the possibility of becoming a GMO, everyone wants to know “What will best prepare me for the type of work and patients that I will see?” We have found that the most applicable medical knowledge for our current duty stations comes from a few rotations completed in an internship: orthopedics (outpatient/sports medicine), dermatology, ophthalmology, emergency medicine, psychiatry, internal medicine (outpatient), and family medicine. While the benefit of ER and orthopedics is intuitively obvious, the applicability of the other fields mentioned becomes more apparent in the practice of field medicine. Newly deployed Marines and sailors find themselves with ailments that include rashes, acute and chronic eye irritation from the frequent sand storms, and mental health problems ranging from adjustment disorders to clinical

Top ten rotations according to a survey of 87 GMOs who graduated in 2003.



depression. It is important to realize that as GMOs, we are not expected to be subject matter experts in any of these fields. However, when we are confronted with a patient that needs specialist care, we are expected to perform a thorough history, physical, and evaluation, and then present the case to a consulting specialist that may be miles away.

To serve with the Marines, most physicians must complete Field Medical School for Officers (FMSO). This course is designed to give us a glimpse of how field medicine is practiced. It is a 2-week combination of class work and practical application at a military institution. Many of us received this training at Camp Johnson, NC, or Camp Pendleton, CA, where we were indoctrinated to chemical warfare, preventive medicine policy, land navigation, weapon

maintenance, and the gas chamber. For most, it was the first time firing a pistol. At the end of the course, we earned our Fleet Marine Force (FMF) designator and were approved for duty alongside the Marines.

Aside from being a physician, the GMO is also a military officer and falls under a chain of command. The GMO's role is to maintain the operating force by keeping as many "trigger pullers" on the front line as possible. When injuries occur, we utilize administrative tools such as sick in quarters (SIQ), limited duty boards (LIMDU), and physical examination boards (PEB) to ensure the health of the personnel. When a GMO is assigned to a Combat Service Support Battalion, they are Battalion Surgeons, and report directly to the commanding officer (CO) of the battalion. They

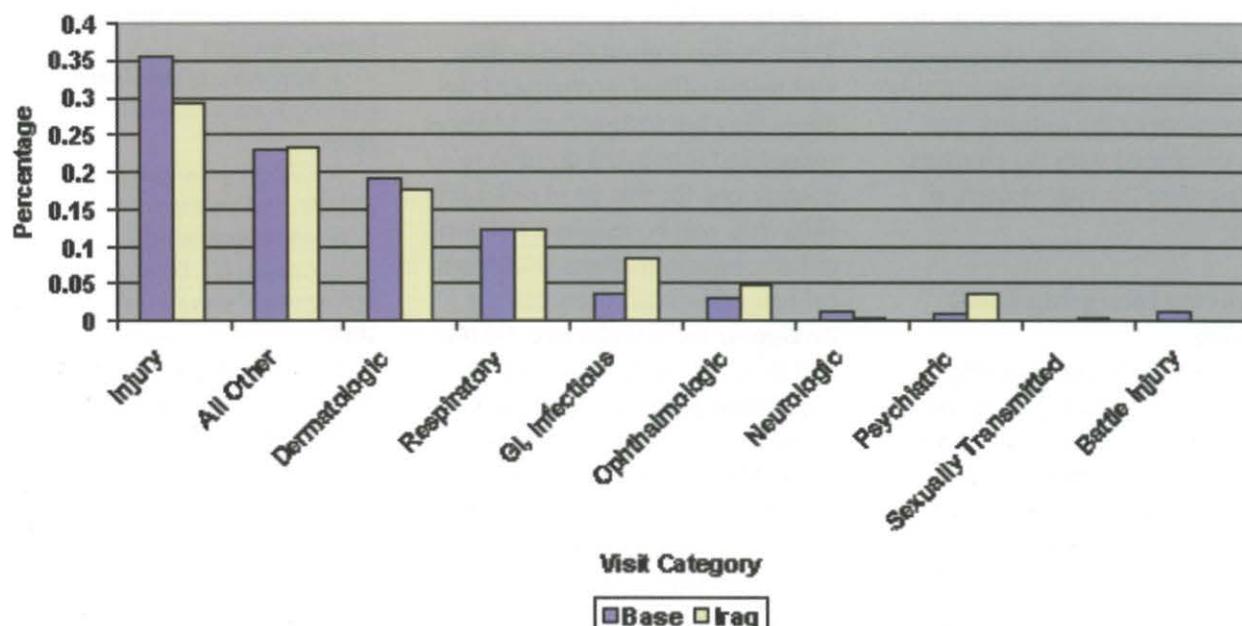
keep the CO apprized of any significant medical cases, outbreaks, or hospital admissions.

The hard truth about being a physician assigned with the Marines is accepting the probability of deployment. As if becoming a physician isn't hard enough, becoming a military physician in a field environment takes it to another level. As solo practitioners straight out of an internship, we find ourselves forced to mature faster than our residency counterparts. Decisions begin and end with us regarding all medical care for our Marines and sailors.

Iraq: the Country, the Theater

Iraq occupies 167,925 square miles with a population of just more than 24 million. The Iraqi summer is May to October with temperatures ranging from 37°F to 122°, while winter is November to April with a

Chart 1: Camp Taqaddum vs Area of Operations Visits (27 March through 18 June 2005)



temperature range of 25°F to 109°F. Sand storms are most severe from May to October. Due to the extremes in temperature there is a great potential for heat and cold injuries.

Armed Forces Medical Intelligence Center (AFMIC) assesses Iraq as an intermediate risk for infectious disease, indicating that force health protection measures must be enacted to prevent disease impact on the mission. Some of the food-borne and water-borne diseases of intermediate risk in Iraq include brucellosis and cholera. Vector-borne diseases include cutaneous and visceral Leishmaniasis, and sand fly fever. Water contact diseases include leptospirosis and schistosomiasis. Tuberculosis is the main respiratory disease of the intermediate risk category. Animal-contact diseases of risk include anthrax, Q-fever, and rabies.

The food served to the troops is imported from the United States

and other countries such as Germany, thus eliminating many of the potential food-borne pathogens.

Dangerous Iraqi fauna include snakes, scorpions, and spiders. There are about six venomous snake species and nine potentially fatal venomous scorpion species in Iraq. Spiders of Iraq include tarantulas and relatives of the black widow and sac weaver. Another arachnid is the camel "spider" which is a misnomer as it is not a spider.

To help the GMO perform preventive medicine, the Marines have a Preventive Medicine Unit (PMU). One of the roles of the PMU is to monitor the heat index with a special thermometer known as the wet bulb globe thermometer (WBGT).

Injury and illness

Most of the sick call visits are upper respiratory infections, rashes, non-battle injuries, and gastro-

enteritis. The emotional stress of being deployed along with novel aeroallergens and climate changes can result in flares of rashes such as atopic dermatitis and urticaria.

Although respiratory visits on base are mostly upper respiratory infections, some patients present with reactive airways especially during sand storms.

Most of the psychiatric diagnoses and visits relate to combat stress. Combat stresses include any physical or emotional changes associated with events experienced on deployment. Most cases are adjustment disorders or mild depression.

Other visits included ENT (ear infections), urologic (epididymitis and kidney stones), internal medicine (hypertension, chest pain), surgical (thrombosed hemorrhoids), and gynecologic (vaginal bleeding). There were only a few ophthalmologic cases but they are significant. Protective eye wear is greatly

emphasized to prevent blast-related eye injuries and corneal abrasions from sand storms and airborne debris. Personnel are also discouraged from wearing contact lenses in this environment as the airborne particles combined with the contacts may increase the risk of corneal ulcers.

Improving Internship/GMO Training

Just how well did internship training prepare us for being general medical officers in the combat zone? An internship serves two purposes in the development of military physicians. One is to prepare interns for further training in their respective residency. The other objective is to prepare them for an operational tour. This requires a broad knowledge of ambulatory care. Accomplishing both of these objectives can be challenging for an intern, but possible.

The internship is largely based on inpatient care, but the GMO functions in an outpatient capacity. Thus, rotations that include outpatient ambulatory care are one of the keys to preparing for an operational tour. Most of the sick calls we see are related to musculoskeletal injuries, URIs, and skin rashes. Formal outpatient training in specialties such as urology, general surgery, orthopedics/sports medicine, dermatology, otolaryngology, and ophthalmology, as well as a radiology rotation that focuses on sports medicine, chest and abdominal pathology would prove beneficial. The challenge is to create a good balance of inpatient and outpatient rotations that will allow the intern and future GMO the best exposure to the conditions he or she may experience.

Another challenge faces the new GMO. In addition to being a physician, he or she is a naval officer. There is also a good chance they will be the officer in charge of the clinic they are assigned to. Medical school and internship do little to prepare one for this level of leadership. You will be required to learn quickly how to manage your medical team. Medical resources are invaluable tools to the new GMO. ATLS/ACLS, radiology, and internal or emergency medicine would prove invaluable along with the GMO Manual information specific to such topics as musculoskeletal injury, dermatology, ophthalmology, and general surgery. Information in PDA versions is easier to travel with but power availability is often uncertain. The Internet is also an excellent source, but with an uncertain power system, connectivity can be unstable and unreliable. This would make books most practical.

Practicing medicine independently for the first time as a GMO can be daunting. Naval internships will prepare you for this challenge. Deployment will test you physically and mentally, but you will be prepared. In the end you will mature as physicians and be better prepared for the rigors of residency. In other words, if you can forget about the dangers, risks, and emotional stresses of being away from American soil, just for a few seconds, there are some upsides to deployment. Really!

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All the authors are general medical officers and were assigned to Camp Taqaddum, Iraq at the time of this article. Contributing authors CAPT K. Knoop, MC, and CDR T.A. Craig, MC, were assigned to TQ Surgical, Combat Logistic Regiment-25, Camp Taqaddum, Iraq.

Tattooing in the Navy, as shown by the records of the USS *Independence*

Perhaps outside of the rum ration, nothing is more associated with the tars of the “old” U.S. Navy than the tattoo. In 1908, Navy surgeon Ammen Farenholt decided to conduct a study on the practice of personal adornment in the Navy while serving aboard USS Independence. His findings, first published in the U.S. Navy Medical Bulletin (1908), is a fascinating time capsule offering a glimpse into the habits and interests of our Navy ancestors.

Reprinted from the *U.S. Naval Medical Bulletin*, Vol. 2, No. 2, April, 1908, pp 37-39, by Ammen Farenholt.

Probably no class of persons has the opportunity to see such an amount and variety of tattooing as that upon whom duty of physical examination for a military or naval service devolves, and undoubtedly the latter presents the richer field. Why this form of personal adornment should be so popular with those whose profession it is to follow the sea is difficult to explain; but custom and sentiment without doubt keep alive a practice which, in the early days, was the mark of a true deep-water sailor and a necessary requisite to the beau ideal. The custom probably originated among the natives of the south-sea islands where at one time it was almost universally in vogue, whence it was carried by admiring voyagers to home ports and in turn imitated by the envious. The

name is considered to have been derived from the Tahitian word “tatu,” of the same meaning.

While tattooing originated as an adornment of uncivilized peoples, it is far less common among them to-day [sic] than it was formerly, partly through the influence of missionaries; partly, also through the influence of public sentiment; and partly through Government interference, as is at present the case in Japan. On the other hand, the total extent of this habit had probably never been greater than it is at the present time. Although it may be there is a slight decrease in the percentage of tattooed persons who adopt the sea as a means of livelihood, there is certainly a marked increase among those who travel and even among those who live at a large distance from the influences

of the sea. There is hardly any large city but has one or more professional tattooers, often ex-man-of-war men or Japanese, who advertise freely and who cater to the lure of this fascination.

Lombroso states that few people, with the fortunate exception of sailors, are tattooed who are not of the criminal class, or degenerate. While on shore it is probable that the custom is chiefly confined to the lower orders of society, the same can not be said of the seagoing population. I have recently examined the enlistment records of 3,572 men, being the enlistments on this vessel for a period of eight and one-half years, and have obtained the following data for that portion of our enlisted force:

Percentage of men found tattooed on examination for second and subsequent enlistments: 53.61

Percentage of men found to be tattooed on examination for first enlistment: 23.01

While the former figures give a fair estimate of tattooing among the “old timers,” it is a trifle under the correct estimate for the service as a whole, and I think it would be nearer the truth to say that about 60 per cent of persons who have served over ten years are thus

marked. On the other hand it is not fair to assume that 23 per cent of all male civilians are tattooed because that was found to be the percentage among those who presented themselves for first enlistment, as a considerable proportion of applicants are seafaring men and as it is probable that some men conceal previous service. On inquiry, however, I have been surprised to find so many, probably 8 per cent of the recruits, who are tattooed and who deny having been at sea or even having lived in seaport towns. I think the custom is more common in camps and in places where men are collected in large numbers than is ordinarily imagined.

The designs were found to have been placed in the following locations according to numerical preponderance: (1) Forearms; (2) arms; (3) chest; (4) shoulders; (5) hands; (6) wrists; (7) legs; (8) feet; (9) back; (10) face; (11) penis.

The conventional designs in order of frequency were the following: (1) Letters; (2) coats of arms; (3) flags; (4) anchors; (5) eagles and birds; (6) stars; (7) female figures; (8) ships; (9) clasped hands; (10) daggers; (11) crosses; (12) bracelets; (13) hearts.

Letters, mottoes, initials, and allied devices lead the list and constitute about 26 per cent of all ink marks. Coats of arms and national emblems follow with about 25 per cent, then flags, anchors, etc., as is shown by the list above. Female figures are shown in 18 per cent of all tattooing; but if all figures in which women are shown, such as nude women, Gibson heads, sailor and girl, and portraits, are included, the percentage rises to 33, one in every three men tattooed selecting a design, some part of which is a

female figure. Less than 1 per cent show indecent subjects; almost invariably such designs have been covered by other work, as also frequently have letters, names, and the once common tombstone scene. The usual types were found, among them, such as: H O L D F A S T (a letter on the back of each finger); apprentice knot; pig on dorsum of foot, which among the older men was supposed to shield its possessor from death by drowning; crucifix, which in case of death would insure Christian burial in a Christian country, and "Jerusalem cross," which would answer the same purpose on Moslem shores. Of the latter there were 14, all in reenlisted men. One man was adorned with a sock covering each foot and extending above the ankles; another with a fox-hunting scene, the dogs in full cry over the abdomen, up over the shoulder, down the back, and the

fox almost reaching the buttocks. The entire back was covered in one case by a large Masonic column and globe. "Little Egypt" figured in two cases and a copy of a Schlitz beertrade-mark in one. The penis was found to be tattooed in 7 cases, 3 on the glans and 4 on the sides; one of the former represented the American flag. The following designs were found to be more popular on reenlistment than among those who came directly from civil life: Goddess of liberty, ships, eagles, pigs, and, apprentice knots.

Notes

"Gibson girls" were artistic creations of Charles Dana Gibson in the late 19th /early 20th century. Gibson's girls were considered the models of ideal American feminine beauty.

"Little Egypt" was the stage name of the belly dancer Ashea Wabe who garnered celebrity after appearing at the Columbian Exposition of 1893. □.



Ammen Farenholt

BUMED Archives

Angel of Marines

HMCS(FMF) Fred E. Kasper, USN

It was early spring 1944 in Taunton, MA. American flags gently waved in proud display from several storefronts, while fueled debate over the war echoed from the local barbershop.

Richard De Wert, a quiet and playful 13 year old, meticulously built a makeshift fort out of cardboard in his backyard. Pretending to be a doctor, he carefully bandaged the injuries of his make-believe comrades and conjured visions of these toy soldiers winning the war against the Axis powers in Europe. Placed in a foster home by his single mother, his loneliness was quickly answered when Albertina and Joseph Roy welcomed Richard into their home. Richard quickly became the child the Roys never had and flourished in the love and comfort they provided to him. His dream was to join the Navy and become a doctor. He excitedly shared this dream with anyone that would listen, especially the Roys, who offered him the valuable encouragement he needed.

A month after turning 17, on 2 December 1948, he walked into the Navy Recruiting Station in Brockton, MA, and enlisted as a hospital corpsman.

Richard attended basic training and Hospital Corps "A" School at the Naval Training Center, Great Lakes, IL, and in late July 1949 received orders to Naval Hospital Portsmouth, VA. Following North Korea's invasion of South Korea on

25 June 1950, the U.S. responded by going on full alert. Richard volunteered to serve with the 1st Medical Battalion, 1st Marine Division.

As Richard prepared for deployment at Camp Pendleton, CA, he met dental technician Francis J. Redding. They soon realized they had a lot in common. Both were assigned to 1st Medical Battalion, were the same age, and were E-3s. The little spare time they had was swiftly consumed as they received crash courses on how to wear their new Marine uniforms, assemble their field equipment, and make the gradual and often tough adjustment to the Marine Corps.

Richard and Francis spent the next 6 months together with the 1st Medical Battalion as they assembled field hospitals, took in the wounded, and embarked on many campaigns to include the amphibious assault and seizure of Inchon; the assault and liberation of Seoul; and the 1st Marine Division's advance deep into, and the subsequent withdrawal from North Korea. "He was a fairly reserved person, and was very gung-ho," recalled Redding. From the very onset of operations at Inchon, HN Richard De Wert repeatedly requested to be transferred to the front line Marines where he felt he could be more effective.

Division Special Order No. 69-51, dated 6 March 1951 directed De Wert to detach from Headquarters and Service Company, 1st Medical Battalion, and report to Commanding Officer, 7th Marine Regiment for duty. As he got his things in order for his departure to Dog Company, he pleaded and bartered within the 1st Medical Battalion to obtain extra supplies to include brand name Band-Aids® and aspirin, a very rare commodity at this time.

While Dog Company prepared for offensive maneuvers just north of Hoengsong, South Korea at the Kunsamma Pass, a jeep pulled up to company headquarters.



Richard De Wert in Boy Scout uniform, August 1944.

Photos courtesy of author

Richard briefly glanced around, stepped out of the jeep, and grabbed his medical bag and a large round wicker basket from the back seat. He was given his field equipment, C-rations, and directions to 3rd Platoon, about a half mile down the road. Weighed down by his gear and equipment, he reported to the platoon commander, LT Richard Humphreys. "There he was, carrying this large wicker basket overflowing with medical gear and medications. I'm used to seeing corpsmen check in with a sea-bag loaded with personal gear and other items, but not him. When I asked him how he was going to carry all of that stuff he replied, 'It's my duty sir, I have to carry it.'"

On 7 March, 1 day after Richard arrived at the company, they proceeded north of Hoengsong, South Korea. It was here that the men of Dog Company witnessed horrors beyond imagination as they discovered the aftermath of a Chinese and North Korean ambush. The victims were elements of an Army convoy. "Bodies were everywhere, most of them had been stripped of their clothing down to their underwear before being shot," stated Fred Frankville, a PFC rifleman. "There were literally hundreds of bodies strewn about, some in jeeps, others with their weapons still clenched in their hands, all frozen in time. Seeing their final expressions captured on their faces, like figures in a wax museum, just didn't appear to be real at first. It was a grisly sight I and others will never forget," said Frankville.

Tom Cassis recalled "There were vehicles overturned and on their sides, some were still burning and giving off smoke. I remember seeing an awful lot of dead, at least 50

or 100 at first glance. What stuck in my mind the most was seeing two Chinese in front of us that had been run over by a tank, the track marks could still be seen on their backs as they were flattened to a height of maybe two inches." This area, known as "Massacre Valley" resulted in a death toll of more than 700 Americans. Only one Dutch soldier survived.

By 11 March 1951, Dog Company moved further north of Hoengsong, while Operation "Ripper" gained momentum. At around midnight, 3rd Platoon received a desperate call for help over the radio from 1st Platoon which was pinned down by heavy Chinese fire. As the 3rd Platoon advanced in an effort to reinforce the troubled 1st Platoon, Chinese grenadiers viciously attacked their position. "Explosions erupted everywhere as shrapnel pierced through the surrounding trees, hurling splinters and fragments of earth in every direction. When the smoke cleared, four Marines including myself were severely wounded. I counted 11 or 12 grenades thrown at us before I got hit," stated Jack Larson, a Sergeant and squad leader. "Richard was frantic as he patched everyone up and moved through incoming fire with little regard for his own safety. That's about the time I got injured," Larson said.

Running on adrenaline, Richard knew the priority for him was to evacuate the wounded and quickly get back with the platoon where he was needed. On 15 March, Dog Company was placed in reserve in anticipation of getting back up to strength.

It wasn't long before Dog was back up to strength and on the move again. The Army's 1st

Cavalry Division at this time was preparing for operations south of the 38th parallel in an effort to fortify their lines and push the Chinese Communist forces back north. "I remember when the company received a brief about how the North Korean and Chinese forces were massing just north of us. That's also about the time we were told that the 7th Marines were being placed under the 1st Cavalry Division," recalled Ed Garr, a PFC machine gunner.

Fighting continued for Dog Company as they made their way north with skirmishes and ambushes to their position nearly every stretch of the way. "It seemed like a never-ending struggle of taking one hill after another. First we attack, then dig in, and then wait for the counterattack, only to repeat the same process for days on end," stated Gonzalo Garza, the platoon sergeant.

By 1 April, Dog Company arrived at their objective. Although the platoon navigated through countless dangers and obstacles on 2-3 April, their luck ran out on 4 April as they made contact with the enemy. A loud "boom" and accompanying shockwave violently rustled leaves on the ground. Assuming they were under mortar attack, they quickly established a defensive posture. Moments later "Corpsman Up" was relayed within the platoon and Richard De Wert began to edge and crawl his way closer to the wounded. Nearby, PFC Charles Whatley lay helpless, screaming in agony, and bleeding profusely from a blast sustained by tripping a land mine. SGT Garza was just feet from Whatley when the tragic event occurred. "What was left of his leg

was a mess as he cried out in pain. I tried to console him and tell him he was going to be all right, but I could tell that he was badly hit." As Richard inched forward, he carefully removed a large bandage from his bag, opened it with his teeth, and applied pressure to the mangled and nearly severed leg. Trying desperately to ease the pain and stop the bleeding, Richard applied a tourniquet to Whatley's upper thigh, administered morphine, and continued treating him for extensive shock. Within an hour the platoon established a landing zone and a helicopter swiftly evacuated their wounded comrade.

Darkness swiftly approached as Dog Company set up camp for the evening. Just past 0530 a voice came from behind him, "Everybody up and on your feet; we're moving out in 1 hour."

By 0630 Dog Company and Easy Company set off on foot, with heavy tanks in support for their joint mission in seizing objective point 43, an unassuming hill some 439 feet high.

Dog and Easy Companies slowly made their ascent up the hill. Finding two narrow fingers that paralleled one another, Dog Company took the finger to the south, while Easy Company took the finger to



HN Richard David De Wert
November 7, 1931-April 5, 1951



BUMED Archives

A wounded Marine is loaded aboard an ambulance at a forward aid station in Korea.

the west at about 9:00 a.m. They made steady progress in their ascent up these two natural fingers in the mountain.

After nearly an hour of climbing, Easy Company began taking fire. Then suddenly and without warning, third platoon began taking machine gun fire from the same enemy bunker. "The platoon was trapped under a ledge as machine gun fire opened up from above. Those that were on point and went into the clearing were the ones that got hit with enemy fire," stated Frankville. As three Marines on point position lay severely wounded De Wert shifted his medical gear to his side and prepared for his dash out to those in need. Aware of Richard's intentions, SGT Garza grabbed Richard by the arm and said, "Doc, don't go out there. Wait until its time, wait until it's clear!" Richard said, "You do your job and I'll do mine." He then moved into the open against a barrage of incoming fire.

As bullets kicked up dirt in front of him, he dove for the ground as he arrived at the position of his first casualty, PFC Anthony Falatach.

De Wert grabbed him by the arm-pits, positioned him between his legs, and kicked his way to safety as he maneuvered around on his backside. Richard was hit in the leg by a blast of enemy fire just as he made it to cover. Despite this wound he dodged through a hail of machine gun fire for the second time, quickly grabbed CPL Donald Sly by the collar, and swiftly dragged him to safety. Taking no time to rest, he crawled and slithered to PFC Richard Durham. As he approached Durham, he received a devastating wound to his right shoulder ripping flesh and shattering bones. Richard continued to Durham's position only to realize that the Marine had been shot through the head and killed instantly. Undaunted, he pulled Durham's body out of the line of fire.

The platoon began taking sporadic fire from several snipers and sharpshooters above their position. CPL Keith Ester, squad leader was shot through the knee. Weak from blood loss, and refusing to submit to aid for his own wounds, De Wert mustered all his strength to aid Ester. Fred Frankville witnessed

Richard's final actions, "It was pretty foggy as we made our way up the hill. As I advanced up the line and got a clear field of vision, the fog all of a sudden lifted almost like a dream. That was when I saw Richard run out to CPL Ester. As Richard leaned over him to provide aid he was mortally wounded by a burst of enemy machine gun fire and fell lifeless on top of Ester."

Having seen the tragic death of his corpsman, Frankville pulled Ester behind a ledge to safety. "Seeing Richard De Wert's bravery and selfless actions was the turning point because it inspired us to move against the enemy regardless of the odds. Who knows what would have happened to us if Richard De Wert had not gone out there and did what he did; we were pinned down and clearly at the mercy of the Chinese," stated Frankville.

As PFC Chuck Curley and CPL Art Rud carried Richard De Wert's body off the hill, it was a solemn time of reflection. Water sprayed out of Richard's canteen from numerous bullet holes. The men of Dog Company paid respect to their fallen corpsman, as many rendered a salute and farewell. SGT Garza had this to say at the end of his interview, "You know, I never lost one single person from my platoon from mid-February until that tragic day on 4 April."

Later that next year, Richard David De Wert was posthumously awarded the Medal of Honor. The citation was signed by President Harry S. Truman. □

On 19 November 1983, the Guided Missile Frigate USS *De Wert* (FFG-45) was christened in Bath, ME, and was the first ship to bear his name. Richard De Wert is also a common household name in Taunton, MA, as streets, a library, a VFW hall, and even a housing development proudly share his name. Most recently, in 2004, two Naval Medical Clinics, one at Newport, RI, and another at the Marine Corps Mountain Warfare Training Center in Bridgeport, CA, held dedication ceremonies and renamed their facilities in honor of Richard De Wert.

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Fire on the Flight Deck

Dr. Gary Kirchner was new to the Navy and had little knowledge of the sea. When he was assigned to the Atlantic Fleet's aircraft carrier USS Forrestal (CVA-59), he relished the idea of cruising the placid Mediterranean, the 6th Fleet's standard domain. But that illusion was quickly dashed.

"One evening, while eating in the ward room, the subject came up and I said, 'When are we going to the Mediterranean?' It's one of those comments you make at dinner. And suddenly everything got very quiet. I knew I had just said something that probably was not quite right. One man sitting close to me said, 'Look, Doc, we're not going to the Mediterranean.'

'Oh! Where are we going?' I asked.

'WESTPAC.'

'What is WESTPAC?'

'Have you ever heard of Vietnam?'"

Even before Forrestal departed for the war zone for its first ever combat deployment, the ship's skipper, CAPT John Beling, briefed the young surgeon on his new role—getting the ship's medical department ready for sea and ensuring that its personnel passed the pre-deployment course. "We were not in the honors program but we did, in fact, pass. When we sailed, I remember standing on one of the sponsons with a flight surgeon and him saying to me, 'Well, it's Tuesday. Here goes a whole yearful of Tuesdays.'"

It was 25 July 1967 when the 79,000-ton Forrestal and its complement of over 5,000 officers and enlisted men arrived on Yankee Station in the Tonkin Gulf and prepared to launch air strikes against North Vietnam. Dr. Kirchner and his staff continued to carry out routine duties in sick bay located amidship on the carrier's second deck.

Sick bay consisted of offices, pharmacy, various examining rooms, laboratory, an emergency room-like facility that was really where sick call was held. There were two very large open wards probably capable of about 50 people in each ward, and a small isolation ward off the one side. The

single operating room was marginally equipped, and had a very bad deal. Although there was an anesthesia machine looking like it came out of the Second World War, there was no one to give anesthesia. So it was a contradiction in terms. I'm not going to get into that because I chose not to do so while

I was there. I didn't think it was my business to reform the Navy and especially to reform the worthiness of the operating room facilities aboard. It's one of those things where the list says: anesthesia machine-check, operating room-check, but it bypassed important parts of the whole thing.

H Division had about 65 or so—an admin officer, two chiefs, a bunch of first classes, some second classes, and some strikers—all with different levels of knowledge and expertise—I would say just run-of-the-mill. The senior medical officer was a meek general practitioner who spent most of his time doing things out of our sight. I and two flight surgeons pretty much ran the deal.

I became as heavily involved as I could be in activities on the ship other than doing my job. I'm a very early riser so I would be up around 5. After messing around with some paperwork, one of the dental officers, the flight surgeons, and I would all go have breakfast. After we returned, we'd hold sick call.

Sick call would vary considerably. If it were during a port period, it was pretty heavy, maybe 30 or 40 guys. If it was routine at sea, it was not all that many. You had the usual minor type of injuries and the usual requests for light duty chits and things like that. It wasn't complicated. If there was some minor surgery to be done, I would do it at that time, right after sick call. But I limited the activity to that which was absolutely local anesthesia and nothing beyond that. I wasn't going to take out somebody's gall bladder at sea. The surgery was minor. The biggest request was, could I remove the girlfriend's name from a tattoo?

We were only on station 4 days and that 4th day was startling. It was the routine I just described that pretty much saved me because I was not up on deck. I was down in the sick bay, not watching air operations. That conflicted with sick call, and I was down where I belonged.



Crewmen and a destroyer fight the *Forrestal* fire as a helicopter ferries firefighting equipment to the burning carrier.

I was treating a sailor with a busted hand, who had been brought over from one of the destroyers. I was infiltrating the fracture site with Xylocaine in preparation to reducing the fracture when I heard the 1MC announcement "Fire on the flight deck!" The announcements just kept escalating, starting with fire on the flight deck to general quarters as 1,000-pound bombs began going off on the flight deck.

I could really feel those explosions. The lights blinked and all the trash in the overhead came down and the ship rocked. It was a pretty thunderous noise. The flight deck was behind sick bay and we were below the hangar deck level and forward of that part of the flight deck being blown apart. But it's not like we were a half mile away. We were very, very close, as close as I ever want to be to a thousand-pound bomb.

We began seeing the results of what was happening almost immediately. The senior medical officer came to me in the middle of all this and said, "Well, Gary, you understand all this; I don't. If you need any help, I'll be in my cabin." I figured, what the hell. It's better that somebody admits they don't know rather than trying to fake it. And by him standing down and standing away, nobody questioned what I was doing.

We were immediately confronted with a whole raft of people. It was a classic mass casualty deal and I had no training in that. I understood in a limited sort of way what triage was. But it was not all that hard. I made rapid assessments of each individual and put them in a category. I had three categories of triage. I had the people I thought had no chance of survival placed in a special area in the sick bay. I let the corpsmen

work on those with minor injuries. And those who needed skilled medical or surgical care, I put in the third category. I knew very, very well that there would be no chance in hell that I was going to be able to handle this group of people definitively. My bias was to quickly stabilize them and quickly get them off the ship to a facility that could handle them.

The help came in airlifting them off the ship to a facility that could care for them. A friend of mine came over from the *Bon Homme Richard* and said, "Hey Gary, what can I do for you? It sure looks like a helluva mess here."

I said, "Yes. It's time to get off here. Get back to your ship and let me send you patients. And if you've got a spare chopper that can transport, send it over." At that time, I had no good estimate of how many people I had. I just seemed to have a helluva lot. Subsequently, I decided that with all categories lumped together, I probably had 300 people who suffered injuries of varying degrees of severity.

Even though all hell was breaking loose topside, the flight deck forward of the island was available to take helicopters. The Jolly Green Giants from Danang came out to the ship. I took a casualty I wanted evacuated and put him with four litter-bearers and one corpsman. Hopefully there was an IV in place and some morphine and been administered. The assignment was to take the man up the ladder onto the hangar deck, over to the aircraft elevator, and up to the flight deck. There they loaded him onto the chopper, and off they went to wherever the chopper decided to go, whether it was to the hospital



Every available ship in the vicinity helped fight the fire.

ship, Danang, or to one of the other carriers operating in the area.

There was the complete range of injuries but it's hard to know which were the most prevalent—burns, shrapnel wounds, and some pretty dramatic orthopedic injuries like loss of limbs. Getting them stabilized was not a problem. We had enough IV setups and more than enough morphine. In fact, I didn't pay much attention to doses. Each syrette contained a quarter grain of morphine. I had no hesitation giving it until the desired effect was achieved. It had been my game plan that if we were going to leave anybody behind, we would leave them behind really snowed with morphine.

Because of the fire and exploding ordnance, there were many burn victims but most of them were already dead. They were incinerated. They were trapped and incinerated. It wasn't like they suffered 30 percent body burns—first, second, and

third degree. These were people who were dead of massive burns. That's what killed the majority of the people.

And all the while, ordnance was going off almost sequentially. I don't know how many minutes they were going off. It's one of those things where your judgment of time is poor. We also knew about all the firefighting because people were running up and down the passageways. Some were rolling barrels of fog foam. We were very aware that there was something big going on. You would have had to have been dumb and blind not to have figured that out.

At one point, they passed the word to prepare to abandon ship because the temperatures in the aft magazine were rising. If they rose to a critical level, the whole damn thing might blow up. In retrospect, it's all ridiculous because had the temperature rose to that level, and, in fact, exceeded that level, and the

magazine did blow, there would have been nothing left of anybody on that ship or any part of that ship. There would have been a gigantic hole in the ocean. We carried incredible amounts of munitions, including, I was led to believe, nuclear weapons.

In the middle of all the activity, a corpsman came by wearing a lifejacket and I didn't think that was a good idea. I said to the corpsman, "Put your life jacket where you can find it but don't put it on. If a sailor who has a significant injury sees you in a life vest, he's gonna figure it out." So I told everyone not to wear their life vests. I never even found mine and never went to look for it. I had other things on my mind. The only thing I thought of was, "We're in tropical waters. If we abandon ship, the water's warm." This is crazy thinking, but you do crazy thinking under circumstances like that.

Maybe it was 10 hours after it all began—I don't recall—when I came up on deck to look about. I saw guys pouring seawater down giant holes in the flight deck with steam and smoke rising out of them. I saw sailors pushing stuff

over the side. I have a conflict with what I recall. Did I really see it or did I see it in movies? Did I really see it or did I see it in photographs? Did I really see it or did somebody tell me about it? I can't say yes or no. I have two pictures I made myself and one shows four shirtless sailors with fire hoses draped across their shoulders, looking like hell, pouring water down one of those bomb holes. No, I can't tell you what I saw, what I heard, etc.

When we pulled into the wharf at Subic Bay, we still had fires burning and there was some question as to whether they would let us come alongside the wharf because of these fires. When I finally got off onto the wharf and looked at the ship, there was no question in my mind. You didn't have to be an engineer; you could just look at it. The forward two-thirds of the ship didn't look bad, but the aft one-third was just destroyed.

There was absolutely nothing left for me to do. I never even tried to make any kind of records whatsoever. There were no records you could make under those circumstances. I had patched a couple of

people up in the operating room but I wasn't dictating notes or anything like that.

Once we were tied up, we started to have routine sick call. Most of the people who had anything serious, I sent off the ship to the shore medical facility. Why would I want to fiddle around with them on board a severely damaged ship? Then, much to my chagrin, they elected to sail the ship back to the East Coast—35 days at sea. And I rode it back.

It was awful. First of all, we were sitting ducks. I can't imagine anybody would have tried to take a hit at us but we couldn't do anything about it if they had. But worse, if anybody got really sick, I couldn't get them off the ship. I had no anesthesia. A ruptured spleen is not something you want to do under a spinal anesthetic administered by a flight surgeon. Only a fool would have been too dumb to be scared. It worried the living hell out of me for 35 days. A large portion of that travel was out of range, sight, etc. I was so damn glad to get back home, it wasn't even funny. □

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Book Review

Life in Mr. Lincoln's Navy by Dennis J. Ringle
Naval Institute Press, Annapolis, MD. 1998, 201
pages.

Dennis Ringle's book, *Life in Mr. Lincoln's Navy* reads like a sociological case study of Billy Yank at sea during those tumultuous years of the Rebellion. In a mere 201 pages, Ringle captures statistical aspects, the steps one went through in enlisting, what an average day was like for the common sailor; in essence, Ringle revives the humanity of our long gone tar ancestors, much to the pleasure of the reader.

Ringle reminds us that the U.S. Navy was a diverse organization. Muster rolls of the time reveal that "common" sailors had a plethora of civilian occupations before enlisting, which included bakers, blacksmiths, bricklayers, butchers, cobblers, cooks, farmers, foremen, hatters, masons, molders, sailors, shoemakers, waiters, woodcarvers, and upholsterers. The average age of a Union sailor was mid-'20s, but the age ranged from 12 to over 60.

One of the most interesting portions of the book is the chapter on food, or rather the barely edible rations masquerading as food. Ringle explains that on long days in the blockade of Confederate ports, food often broke the monotony. As one sailor put it, "When breakfast is done, the next best thing I look forward to is dinner, and when that's done, I look forward for supper time..." The tar's diet was rich in protein, and carbohydrates, but deficient in taste. A fine example was the dreaded "hardtack" which served as the staple bread ration. Usually measuring 3 inches square by 1 inch thick, it consisted of plain flour and water. Over time this bland concoction became susceptible to mold and maggots. Ringle describes one sailor cracking open his hardtack to find two nourishing worms making residence inside. To compensate for the lack of taste, and perhaps to supplement the mealy pests, hardtack was sometimes soaked in fresh water and backed with salt pork and molasses. The end result was known by the even less appetizing name, "dandyfunck." Clearly, while aboard ship, Jack Tar was stuck between a rocking boat and a hardtack.

At the start of his chapter on medicine at sea, Ringle reminds us that history books are always

filled with passages dedicated to the valor of men and their heroic exploits, but rarely do they tell the rest of the story, i.e., the percentage of men and ships that did not participate in an engagement because of illness and disease. During the war, the Navy lost 1,800 sailors in action and 2,550 to disease. Interestingly, in comparison to the Army, the Navy fared much better with disease. The Army lost 1 out of every 12 soldiers due to disease, whereas the Navy lost 1 out of every 50 sailors from disease.

In the Civil War, the Navy operated eight major hospitals. Facilities at Chelsea, MA; Brooklyn, NY; League Island, PA; Memphis, TN; Mound City, IL; Portsmouth, NH; Portsmouth, VA; and Washington, DC, were some of the best medical facilities of the war; each earned a reputation for providing excellent healthcare and, according to Ringle, offering a "congenial" atmosphere. Part of the Navy's success in healthcare was due to the Navy's excellent medical laboratory in Brooklyn, NY. Throughout the Civil War, the Navy had a supply of good quality medicines available for ships and hospitals.

In hindsight, many of these medicines and treatments being used by Navy surgeons can certainly be declared antiquated.

In the 1860s, it was still common practice to purge the body of fluids in treating fevers and venereal diseases. Navy doctors often used calomel, rhubarb, julep, and sulfate of magnesia to induce "bowel excretions." Quinine and arsenic were prevalent drugs in treating malarial and yellow fever. Astringent drugs, such as acetate of lead, gallic acid, and nitrate of silver, were used to prevent hemorrhaging. And nitric acid was often employed to slough off putrid tissue of post-operative amputees.

Ringle's *Life in Mr. Lincoln's Navy* is an excellent and eye-opening account of what our Navy ancestors endured. Although, the chapter on medicine and surgery is informative, it is really general overview. For those wishing to learn more about Civil War medicine, Ira Rutkow's *Bleeding Blue and Gray* and Frank Freeman's *Gangrene and Glory* are excellent supplements to this book. □

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Navy Medicine 1944



(Top left) In a scene from "Combat Fatigue" a sailor portrayed by LT Gene Kelly, USNR, spends time with his children ... (top right) and talks about his problems with a psychiatrist. (Bottom) In another scene from the same BUMED training film, the noted Hollywood actor is about to have an accident induced by his emotional illness. Photos from the BUMED Archives.

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